

Notice of Allowability

Application No.

09/200,523

Examiner

AHMED ELALLAM

Applicant(s)

MUJTABA, SYED AON

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 09/06/2005.
2. ☒ The allowed claim(s) is/are 1-3, 5-10, 12-21 respectively renumbered 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 10/14/2005.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Josef B. Ryan on Friday, October 14, 2005.

The application has been amended as follows:

In the claims:

In claim 1, line 16, the phrase "a spreading code specific to at least a portion of the base station" has been changed to --one of a plurality of sector-specific spreading codes, each of the sector-specific spreading codes being associated with a corresponding sector of an antenna of the base station--

In claim 8, line 14, phrase "a spreading code specific to at least a portion of the base station" has been changed to --one of a plurality of sector-specific spreading codes, each of the sector-specific spreading codes being associated with a corresponding sector of an antenna of the base station--

In claim 15, line 14, phrase "a spreading code specific to at least a portion of the base station" has been changed to --one of a plurality of sector-specific spreading codes, each of the sector-specific spreading codes being associated with a corresponding sector of an antenna of the base station--

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The closest prior art of records, Alamouti et al, Sjoberg and Nakagawa, fails singularly or in combination to teach or suggest the following:

A method/or apparatus comprising (inter alias):

communicating information between a plurality of subscriber units and a base station over at least one of an uplink and a downlink, wherein uplink and downlink communications are separated by assigning to one of the uplink and the downlink, k carriers in a set of M OFDM carriers in a given frequency band, and assigning to the other of the uplink and the downlink the remaining $M-k$ OFMA carriers, wherein the value of k is varied such that adaptive duplexing between the uplink and the downlink is achieved, and wherein a converted and transformed M OFMA carriers are multiplied by one of a plurality of sector-specific spreading codes, each being associated with a corresponding sector of an antenna of the base station, as indicated in independent claims 1, 8 and 15.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
Examiner
Art Unit 2668
October 14, 2005


CHIEH M. FAN
PRIMARY EXAMINER